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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,222	03/02/2004	Yuji Nakagawa	108075-00124	9846

4372 7590 09/15/2005

ARENT FOX PLLC
1050 CONNECTICUT AVENUE, N.W.
SUITE 400
WASHINGTON, DC 20036

EXAMINER

PHAM, LY D

ART UNIT PAPER NUMBER

2827

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,222

Applicant(s)

NAKAGAWA, YUJI

Examiner

Ly D. Pham

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005 & 12 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-13 is/are allowed.
- 6) ☒ Claim(s) 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/994,611.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's Response filed August 12, 2005 has been entered.

Response to Arguments

2. Applicant's arguments filed August 12, 2005 have been fully considered but nonetheless, in further view of the claim amendment filed January 25, 2005, which was presented for the RCE filed March 16, 2005, were however not found persuasive. Grounds for the rejection of claim is as follow.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Kojima et al. (US Pat 5,995,429).

Regarding **claim 9**, Kojima et al. disclose a method for conducting a multiple word line selection test (col. 2, line 24 – 64) on a semiconductor memory device provided with a plurality of memory cell blocks (fig. 11 shows a plurality of memory banks 208, in each includes memory cell array 224—memory cell blocks), which include a first memory cell block and a second memory cell block (take an arbitrary first two

memory arrays), each of the memory cell blocks have a plurality of memory cells and a plurality of word lines connected to the memory cells (fig. 6), and a plurality of sense amp groups connected to the first and second memory cell blocks (fig. 11 shows each memory array has a sense amp 223 connected thereto), each of the sense amp groups amplifying cell information read from the plurality of memory cells of an associated one of the memory cell blocks (inherently), wherein when the multiple word line selection test is conducted, the plurality of word lines and the sense amp group in each of the plurality of memory cell blocks are activated (col. 16, lines 14 – 21), the method comprising:

a first step for inactivating multiple word lines in the first memory cell block (col. 16, lines 22 – 24) and the sense amp group associated with the first memory cell block (col. 15, line 62 – col. 16, line 5, after the completion of the data-read operation and the precharging of the bit lines, this means the associated sense amplifier is also deactivated as the PRE command is input to deactivate the selected word lines, as the word line and sense amplifier were activated together to transfer data from the memory cells to the sense amplifier); and

a second step for inactivating multiple word lines in the second memory cell block (col. 16, lines 25 – 29) and the sense amp group associated with the second memory cell block (the operation as described above is repeated for up to the fourth bank, col. 16, lines 20 – 29) after performing the first step.

Allowable Subject Matter

5. Claims 10 – 13 are allowed.
6. The following is an examiner's statement of reasons for allowance:

The prior arts teach a method for conducting a multiple word line selection test on a semiconductor memory device provided with a plurality of memory cell blocks, which include a first memory cell block and a second memory cell block, each of the memory cell blocks having a plurality of memory cells and a plurality of word lines connected to the memory cells, and a plurality of sense amp groups connected to the first and second memory cell blocks, each of the sense amp groups amplifying cell information read from the plurality of memory cells of an associated one of the memory cell blocks, the method comprising:

a first step for activating one or the plurality of word lines ...;

a second step for activating word lines other than the one that has been activated in the first memory cell block;

a third step for activating one of the plurality of word lines in the second memory cell block ...;

a fourth step for activating word lines other than the one that has been activated in the second memory cell block.

However, the prior arts did not further disclose:

a fifth step for inactivating multiple word lines in the second memory block and the sense amp group associated with the second memory block and the sense amp groups ...; and

a sixth step for inactivating multiple word lines in the second memory block and the sense amp groups ... ,

wherein the third and fourth steps are performed while the first and second steps are continuously performed or the second and fourth steps are performed while the first and third steps are continuously performed.

And The corresponding semiconductor memory device for carrying out the above disclosed method for conducting a plurality of word line selection test as provided above, further comprising: in each of the sense amp driver circuits includes a latch circuit that is reset by the word line reset signal and a sense amp reset timing signal.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02(b)).

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly D. Pham whose telephone number is 571-272-1793.

The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho can be reached on 571-272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ly Pham 
September 9, 2005



HUAN HOANG
PRIMARY EXAMINER